UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,986	03/31/2004	Brian J. Buck	04-282	8181

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EXAMINER
CHOW, JEFFREY J

ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 March 2006</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-35</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-35</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>21 February 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1 - 35 have been considered but are moot in view of the new ground(s) of rejection.

However, new grounds for rejections have been made for some of the dependent claims as the scope of the dependent claims have changed due to the amendment of the independent claims.

The drawing objections have been withdrawn based on applicant's arguments and amendments.

The specification objections have been withdrawn based on applicant's arguments and amendments.

The claim objections have been withdrawn based on applicant's arguments and amendments.

The 35 U.S.C. 112 rejections have been withdrawn based on applicant's amendments.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 3, 5 – 17, 19 – 23, 25, 26, and 28 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (US 6,219,052) in view of Duquette (US 2005/0228735).

Regarding independent claim 1, Gould discloses a computerized system 10, comprising a

console 11 containing a CPU 12, memory 13, I/O circuitry 14 connected to a monitor 15 having

a display screen 16, and control devices in the form of keyboard 17 and a mouse 18 (lines 19 –

23, column 1). Gould also discloses a computerized system provides the user with means to

shrink less important or less significant portions of the information displayed, with the result of

magnifying the portions that the user deems significant (lines 14 – 18, column 2) where the

information displayed is in the form of video, sound, graphics or text while maintaining a general

view of the information (lines 63 – 67, column 1) and where the sound graph in Figure 8 shows a

time axis being divided into different linear and continuous regions 51 46 and Figure 10 clearly

shows a time axis being divided into different linear and continuous regions and where the

regions that are expanded and shrunk creates a linear region in each region and where adjacent

regions are non-linear and continuous (column 5, lines 26 – 64, and Figures 8 – 10), which reads

on the claimed at least one axis divided into a plurality of axis regions comprising at least a first

axis region and a second axis region, wherein each of the first axis region and the second axis

region uses a different linear scale, and wherein the plurality of axis regions forms a continuous

non-linear scale on the at least one axis. Gould discloses data being displayed for the sound file

(Figure 8), which reads on the claimed a chart displayed in relation to the plurality of axis

regions, wherein the chart displays the data series, wherein the data series is plotted in each axis

region based on a different linear scale corresponding to each respective axis region. Gould did

not expressly disclose new data and shifting old data from one region to another because of new

data. Gould did disclose that a user can play through a portion of a recorded sound file and will

play at normal speed through the marked segments 51, but will fast-forward at (for example)

twice the normal speed through the unmarked segments 52 and in where the marked segments 51

being expanded in time and the unmarked segments 52 being condensed (column 5, lines 43 – 50

and Figure 8). Duquette discloses a trader workstation 714 that is able to save market data

previously received from the exchange server 710 and loads the historical data first and then

begin processing of the current real-time market data coming from the exchange server 710

(paragraph 69). It would have been obvious for one of ordinary skill in the art at the time of the

invention to modify Gould's system by running and displaying real-time data in a exchange

environment and updating when new data is available from an exchange server and shifting old

data from one region to another, which Gould already disclosed (column 5, lines 43 – 50). One

would be motivated to run real-time data and update the graph when new data is available

because this provides up-to-date information of important data, such as trade information.

Regarding dependent claim 2, Gould discloses where the sound graph in Figure 8 shows

a time axis being divided into different linear and continuous regions 51 46 and Figure 10 clearly

shows a time axis being divided into different linear and continuous regions and data being

displayed for the sound file (Figure 8), which reads on the claimed each linear scale is a linear

time scale and the claimed data series comprises a time data series.

Regarding dependent claim 3, Gould discloses where the sound graph in Figure 8 shows

a time axis being divided into different linear and continuous regions 51 46 and Figure 10 clearly

shows a time axis being divided into different linear and continuous regions, which reads on the

claimed scale resolution comprises a time scale resolution.

Regarding dependent claim 5, Gould discloses a computerized system 10 that is user

customizable to display information of high level of detail scale resolution in one section and to

display information of low level of detail scale resolution in other sections (column 2, lines 13 –

21 and Figures 8 – 10), which reads on the claimed plurality of axis regions comprises a first axis

region that displays a portion of the data series using a high level of detail scale resolution, and

wherein other axis regions of the plurality of axis regions use progressively lower levels of

detailed scale resolutions.

Regarding dependent claim 6, Duquette discloses a trader workstation 714 that can load

historical data and begin processing current real-time market data coming from the exchange

server 710 (paragraph 69 and Figure. 7). The combination of Gould's and Duqette's system

mention above reads on the claimed first axis region displays a portion of the data series

corresponding to a more recent time period than a time period corresponding to the second axis

region.

Regarding dependent claim 7, Gould discloses a computerized system 10 is user

customizable to select portion of the data series by being able to expand and shrink sections of

the plot (column 2, lines 13 – 21 and Figures 8 – 10), which reads on the claimed first axis region

displays a user-selected portion of the data series.

Regarding dependent claim 8, Gould discloses a computerized system 10 is user

customizable to create a plurality of axis regions by being able to expand and shrink sections of

the plot (column 2, lines 13 – 21 and Figures 8 – 10), which reads on the claimed plurality of

axis regions displayed in relation to the axis scale is user customizable.

Regarding dependent claim 9, Gould discloses computerized system 10 is user

customizable to modify the scale resolution by being able to expand and shrink sections of the

plot (column 2, lines 13 – 21 and Figures 8 – 10), which reads on the claimed scale resolutions

corresponding to the plurality of axis regions are user customizable.

Regarding dependent claim 10, Duquette discloses a trader workstation 714 that is able to

save market data previously received from the exchange server 710 and loads the historical data

first and then begin processing of the current real-time market data coming from the exchange

server 710 (paragraph 69), which reads on the claimed data series comprises a data series

associated with a tradable object being traded at an electronic exchange, and wherein the data

series is being dynamically updated based on updates received from an electronic exchange.

Regarding dependent claim 11, Duquette discloses a bar chart 300, where each bar 310

represents a range of trading prices over an interval, and additional markings 312, 314, may

represent another parameter, such as opening and closing prices (paragraphs 9 and 104 and

Figures 3 and 9), which reads on the claimed chart displays a plurality of data series.

Regarding dependent claim 12, Duquette discloses displaying range values 312, 314 on a

bar graph 300 (paragraphs 9 and 104 and Figures 3 and 9), which reads on the claimed bar chart

comprises a plurality of bars associated with a plurality of time periods, and wherein each bar

shows at least a range of values corresponding to a parameter related to a tradable object during a

time period associated with each bar.

Regarding dependent claim 13, Duquette discloses displaying range values 312, 314 on a

bar graph 300 and in where the range values may represent opening and closing prices and that

every bar 910 indicates the price range of each auction event (paragraphs 9 and 104 and Figures

3 and 9), which reads on the claimed each bar further displays an opening value and a closing

value corresponding to the parameter related to the tradable object during the time period

associated with each bar.

Regarding dependent claim 14, Duquette discloses displaying range values 312, 314 on a

bar graph 300 and in where the range values may represent opening and closing prices and that

every bar 910 indicates the price range of each auction event (paragraphs 9 and 104 and Figures

3 and 9), which reads on the claimed parameter related to the tradable object comprises a trade

price corresponding to the tradable object.

Regarding dependent claim 15, Duquette discloses the label "VOLUME" in Figure 3 and

the dot 912 on the auction bar indicates the volume weighted average price (paragraphs 9 and

104 and Figures 3 and 9), which read on the claimed parameter related to the tradable object

comprises a traded volume.

Regarding dependent claim 16, Duquette discloses a trader workstation 714 that is able to

save market data previously received from the exchange server 710 and loads the historical data

first and then begin processing of the current real-time market data coming from the exchange

server 710 (paragraph 69), which reads on the claimed values displayed in relation to the bar

chart are dynamically updated based on data updates being received from the electronic

exchange.

Regarding independent claim 17, Gould discloses a computerized system 10, comprising

a console 11 containing a CPU 12, memory 13, I/O circuitry 14 connected to a monitor 15

having a display screen 16, and control devices in the form of keyboard 17 and a mouse 18 (lines

19 – 23, column 1). Gould also discloses a computerized system provides the user with means to

shrink less important or less significant portions of the information displayed, with the result of

magnifying the portions that the user deems significant (lines 14 – 18, column 2) where the

information displayed is in the form of video, sound, graphics or text while maintaining a general

view of the information (lines 63 – 67, column 1) and where the sound graph in Figure 8 shows a

time axis being divided into different linear and continuous regions 51 46 and Figure 10 clearly

shows a time axis being divided into different linear and continuous regions, which reads on the

claimed time axis divided into a plurality of time axis regions comprising at least a first time axis

region and a second time axis region, wherein each of the first time axis region and the second

time axis region uses a different linear time scale, wherein each of the first time axis region and

the second time axis regions uses a different linear time scale, and wherein the plurality of time

axis regions forms a continuous non-linear time scale on the time axis. Gould did not expressly

disclose displaying data series that is tradable objects. Gould also did not expressly disclose new

data and shifting old data from one region to another because of new data. Gould discloses data

being displayed for the sound file (Figure 8) and that a user can play through a portion of a

recorded sound file and will play at normal speed through the marked segments 51, but will fast-

forward at (for example) twice the normal speed through the unmarked segments 52 and in

where the marked segments 51 being expanded in time and the unmarked segments 52 being

condensed (column 5, lines 43 – 50 and Figure 8). Duquette discloses a trader workstation 714

that is able to save market data previously received from the exchange server 710 and loads the

historical data first and then begin processing of the current real-time market data coming from

the exchange server 710 (paragraph 69). It would have been obvious for one of ordinary skill in

the art at the time of the invention to modify Gould's system by running and displaying real-time

data in a exchange environment and updating when new data is available from an exchange

server and shifting old data from one region to another, which Gould already disclosed (column

5, lines 43 – 50). One would be motivated to run real-time market data and update the graph

when new data is available because this provides up-to-date information of important market

data that is necessary in an continuously changing trading scenario.

Regarding dependent claims 19 – 22, claims 19 – 22 are similar in scope as to claims 5

and 12 – 14, thus the rejections for claims 5 and 12 – 14 hereinabove is applicable to claims 19 –

22.

Regarding dependent claim 23, Duquette discloses the label "VOLUME" in Figure 3 and

the dot 912 on the auction bar indicates the volume weighted average price (paragraphs 9 and

104 and Figures 3 and 9), which read on the claimed parameter comprises a traded quantity

associated with the tradable object.

Regarding independent claims 25 and 26, claims 25 and 26 are similar in scope as to

claim 17, thus the rejections for claim 17 hereinabove is applicable to claims 25 and 26.

Regarding dependent claims 28 – 35, claims 28 – 35 are similar in scope as to claims 5, 7

– 10, 12, 14, and 15, thus the rejections for claims 5, 7 – 10, 12, 14, and 15 hereinabove are

applicable to claims 28 – 35.

Claims 4, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Gould (US 6,219,052) in view of Duquette (US 2005/0228735) and Tufte ("The Visual Display

of Quantitative Information").

Regarding dependent claims 4, 18, and 27, Gould nor Duquette expressly disclose the

plurality of axis regions use at least two of a year-based time frame, a quarter-based timeframe, a

month-based timeframe, a week-based timeframe, a day-based timeframe, and a second-based

timeframe. Tufte discloses a bar graph that has two time regions that shoes the current prices of

oil and the predicted increase of oil. Tufte also discloses one of the time region being linear in a

year-base timeframe and the other time region being linear in a quarter-base timeframe (page

61). Duquette discloses time series data being in intervals from tens of seconds, to minutes,

hours, days, months or years (paragraph 9). It would have been obvious to one of ordinary skills

in the art at the time of the invention to modify the combination of Gould's and Duquette's

systems displaying tradable object at different time intervals of all possibilities and combinations

in any order of at least two of a year-based time frame, a quarter-based timeframe, a month-

based timeframe, a week-based timeframe, a day-based timeframe, and a second-based

timeframe. One would be motivated to do so because this gives users flexibility to broadly and

specifically view data of interests within reasonable time scales.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gould (US

6,219,052) in view of Duquette (US 2005/0228735) and Rao (US 6,085,202).

Regarding dependent claim 24, Roa discloses a variable zoom level of having three-level

of DOI and in where the largest focal cell represents the highest level of interests, intermediate-

sized focal cells for the second level of interest, and the smallest context or non-focal, cells of the

third level of interest and this can be applied to any axis or to both columns and rows (column

23, lines 25 – 40, column 24, lines 11 – 28 and Figures 7 and 9). It would have been obvious to

one of ordinary skills in the art at the time of the invention to modify the combination of Gould's

and Duquette's systems by having a second axis in relations to the time axis and in where the

second axis has the same functionality of characteristics as the time axis. One would be

motivated to do sob because this gives users the flexibility to accurately zoom and focus to a

time and region of interests.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Churquina (2003/0139989) discloses a price-volume bar composed of segments,

where "each segment VpBpT is proportionately represented by the segment width, substantially

corresponding to each price bracket in the ordinate axis and where the price bracket 005 has a

relative volume represented by its width 001, price bracket 006 has a relative volume represented

by its segment width 002, and so on for each price bracket" (paragraph 72, page 4 and FIG. 7-A

– 7-E).

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Chow whose telephone number is (571)272-8078. The examiner can normally be reached on Monday - Friday 10:00AM - 5:00PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJC

ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER